



POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 242

October 13, 1961

Table of Contents

SUMMARY

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS
2. REPORTS
3. 1961 POLIOMYELITIS CASES REPORTED TO PSU
4. ROUTINE POLIOMYELITIS SURVEILLANCE - 1961



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SPECIAL NOTE

This report is intended for the information and administrative use of those involved in the investigation and control of poliomyelitis and polio-like diseases. It presents a summary of provisional information reported to CDC from State Health Departments, Virology Laboratories, Epidemic Intelligence Service Officers, and other pertinent sources. Since much of the information is preliminary in nature, confirmation and final interpretation should be determined in consultation with the original investigators prior to any further use of the material.

SUMMARY

The total number of 68 poliomyelitis cases reported during the current week is essentially the same as last week but the 45 paralytic cases represent an increase over the 36 paralytic cases reported for the previous week.

A new outbreak has been reported from Newberry County, South Carolina. Twenty cases, 16 paralytic, have occurred thus far in 1961. A cluster of cases has also been noted in Sullivan County, New Hampshire and adjoining Windsor County, Vermont. No additional cases have been reported from the outbreak in New York State. Narrative reports are included from these areas and Pennsylvania.

Thus far this year, there have been 33 fatalities due to poliomyelitis reported to the Poliomyelitis Surveillance Unit.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

A total of 68 cases, 45 paralytic, was reported for the 40th week of 1961, ending October 7. Although there has been no change in total cases, this represents an increase in paralytic cases over the 36 paralytic cases reported during the previous week. (See Figure 1). During the corresponding week in 1960, 131 cases, including 101 paralytic, were reported.

The table below summarizes the current 6-week experience in poliomyelitis as compared to the past four years.

Six Week Totals (35th through 40th Week) for Past 5 Years

	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>
Paralytic	257	709	1758	1016	536
Total	425	1052	2735	2142	1464

The increase in paralytic cases is reflected in 3 of the 9 geographic regions (See Table 1). An increase of 2 paralytic cases is seen in New England; the East North Central Region increase is due to scattered cases in Wisconsin and Michigan; and a new concentration of cases in South Carolina contributes to the South Atlantic increase. In all regions, the number of paralytic cases reported during the past six weeks is lower than the number reported during the corresponding period in the last three years.

2. REPORTS

A. South Carolina

Dr. G. E. McDaniel, Director of Communicable Disease Control, South Carolina State Board of Health, reports an outbreak of poliomyelitis in Newberry County. Twenty cases, of which 16 are paralytic,

have occurred in this Central South Carolina county. Of the 16 paralytic cases, 13 have occurred since August as follows:

	<u>MONTH</u>			<u>WEEK ENDING:</u>					
	<u>JUNE</u>	<u>JULY</u>	<u>AUG.</u>	<u>9/2</u>	<u>9/9</u>	<u>9/16</u>	<u>9/23</u>	<u>9/30</u>	<u>10/7</u>
Paralytic Cases	1	2	0	1	1	3	3	3	2

Type 3 poliovirus has been isolated from the first four paralytic cases and two of the nonparalytic cases. Specimens on all other cases have been obtained for study. There has been one death.

Fourteen of the 16 paralytic cases have been in the Negro population, 12 of which were unvaccinated; the other two having received only two doses of inactivated vaccine. The cases are presented below by age and vaccination history.

<u>Age Group</u>	<u>Vaccination History</u>				<u>Total</u>
	<u>0</u>	<u>1-2</u>	<u>3</u>	<u>4+</u>	
0-4	4	0	0	0	4
5-9	5	1	0	1	7
10-14	3	1	0	0	4
15-19	0	0	0	0	0
20+	1	0	0	0	1
TOTAL	13	2	0	1	16

Eleven of the 16 cases have been in school age children and all cases since August have been either students at a single school or have had a well-defined contact with this school. Since August, 15,000 doses of inactivated vaccine have been given and the immunization program is continuing.

Dr. James A. Bryan, II, Assistant Chief of the Poliomyelitis Surveillance Unit, CDC, is assisting Dr. McDaniel in the epidemiologic investigation of the outbreak and reports that only six cases of poliomyelitis have occurred in Newberry County during the past ten years.

B. New Hampshire - Vermont

A cluster of 8 cases of poliomyelitis, 4 paralytic, have been noted in adjoining counties of New Hampshire and Vermont. Dr. William M. Prince, Director of Communicable Disease Control, New Hampshire Department of Health reports 2 paralytic and 3 non-paralytic cases in Sullivan County, all occurring between September 8 and September 30. In contiguous Windsor County, Vermont, 3 cases, including 2 paralytic, have been reported by Dr. Linus J. Leavens, Director of Communicable Disease Control, Vermont Department of Health.

Preliminary information concerning the eight cases is as follows:

<u>Age</u>	<u>Sex</u>	<u>Onset</u>	<u>Paralytic Status</u>	<u>Vaccination History</u>	<u>Residence</u>
20 mo.	F	Sept.	NP	OV	W. Claremont, N. H.
2	M	Sept.	NP	OV	Newport, N. H.
5*	M	Sept.	NP	3V	Newport, N. H.
8*	M	Sept.	P	OV	Newport, N. H.
8*	M	Sept.	P	OV	Newport, N. H.
6	F	9-6	P	4V	No. Springfield, Vermont
32**	M	9-11	P	OV	Weathersfield, Vermont
5	F	9-22	NP	4V	No. Springfield, Vermont

*All 3 in same classroom at school; the 8-year olds are twins.

**Bulbar death; type I poliovirus isolated.

Three of the 4 paralytic cases have been unvaccinated; all cases have been under 10 years of age with the exception of the 32-year old fatality. Immunization programs are underway and specimens have been collected for study.

C. New York State

Dr. Robert M. Albrecht, Director, Office of Epidemiology, New York State Department of Health, reports no additional cases of poliomyelitis from the outbreak in Central New York State. Of the 74 paralytic cases reported from the Syracuse area, 44 have occurred in Onondaga County (31 in Syracuse), 17 in Madison County and 13 in Oneida County. The last case to occur had onset on September 24. (See P.S.U. Report No. 241 for further details.)

D. Pennsylvania

Of the seven unspecified cases reported from Erie County last week, only two are paralytic and the remaining five are nonparalytic. Dr. I. F. Gratch, Epidemiologist, Pennsylvania Department of Health, has supplied the following information on the seven cases.

<u>Initial</u>	<u>Age</u>	<u>Race</u>	<u>Sex</u>	<u>Onset</u>	<u>Paralytic Status</u>	<u>Vaccination Status</u>
V.M.	8	W	M	8-17	NP	OV
J.D.	5	W	F	9-1	NP	OV
S.C.*	9	W	F	9-23	NP	2V
M.A.	4	W	M	9-25	P	4V
P.C.*	3	W	F	9-26	NP	OV
T.C.*	5	W	M	9-26	NP	OV
J.C.	2	W	M	9-28	P	OV

*Sibling

All seven cases are under 10 years of age and only one was fully vaccinated while five were unvaccinated. Specimens from the nonparalytic case with onset in August were negative for poliomyelitis. Further laboratory studies are underway.

3. 1961 POLIOMYELITIS REPORTED TO PSU

Through October 7, there have been 721 cases of poliomyelitis with onset in 1961 submitted on individual case forms to the Poliomyelitis Surveillance Unit. Of the 721 cases, 526 (73 percent) are paralytic, 170 nonparalytic and 25 unspecified as to paralytic status. These cases are presented below in Table 3 by paralytic status, age group and vaccination history.

Of the PSU forms received to this date, 33 have been fatalities. Of the 33, 28 of 30 with known type of paralysis have had bulbar involvement. Nineteen of the 33 have been over 20 years of age.

Vaccination History:	<u>OV</u>	<u>1V</u>	<u>2V</u>	<u>3V</u>	<u>4V</u>	<u>Unk</u>	<u>TOTAL</u>
Fatalities	19	3	1	5	3	2	33

TABLE 3

POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP AND VACCINATION STATUS REPORTED ON PSU FORMS (Through October 7, 1961)

Age Group	Paralytic						TOTAL	Percent
	Doses of Vaccine					Unk		
	0	1	2	3	4+			
0-4	121	19	17	23	17	12	209	39.7
5-9	26	8	9	27	25	4	99	18.8
10-14	19	4	6	16	17	4	66	12.5
15-19	9	0	6	11	3	2	31	5.9
20-29	36	3	4	9	3	2	57	10.8
30-39	27	5	2	2	3	4	43	8.2
40+	16	0	0	1	1	3	21	4.0
TOTAL	254	39	44	89	69	31	526	100.0

PERCENT DOSES	51.3	7.9	8.9	18.0	13.9	-	100.0
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Age Group	Nonparalytic						TOTAL	Percent
	Doses of Vaccine					Unk		
	0	1	2	3	4+			
0-4	15	1	6	7	2	2	33	19.4
5-9	7	0	4	14	15	4	44	25.9
10-14	1	3	5	9	16	5	39	22.9
15-19	2	0	3	4	4	0	13	7.6
20-29	6	0	3	7	8	3	27	15.9
30-39	7	0	0	4	0	1	12	7.1
40+	0	0	0	0	2	0	2	1.2
TOTAL	38	4	21	45	47	15	170	100.0

PERCENT DOSES	24.5	2.6	13.5	29.0	30.3	-	100.0
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4. ROUTINE POLIOMYELITIS SURVEILLANCE

A. Cases with Onset Within 30 Days of Vaccination (Inactivated)

Two cases of poliomyelitis (one paralytic), within 30 days of receiving inactivated vaccine (IPV), have been reported to the Poliomyelitis Surveillance Unit during the past week ending October 7. This brings the 1961 total to 15 cases, of which 11 are paralytic (two correlated).

The paralytic case reported this week was a 13 month old male from St. Bernard Parish, Louisiana, who had onset on 8-28-61 after receiving IPV on 8-22-61. He was inoculated with Lilly 4136-782076FR in the right arm and had paralysis of the left arm.

B. Cases with Onset Within 30 Days of Vaccination (Oral)

Two cases of paralytic poliomyelitis, within 30 days of receiving oral vaccine (OPV), have been reported to the Poliomyelitis Surveillance Unit during the past week ending October 7. This brings the 1961 total to 26 cases, of which 21 are paralytic. Of the 26 cases, 23 have received monovalent type I OPV in the Syracuse area, scene of a mass immunization campaign during an epidemic (See previous PSU Reports). The other 3 cases received monovalent type 3 OPV in Atlanta during a mass immunization campaign in the face of a threatening epidemic (See PSU Report #240).

(This report was prepared by Mr. Leo Morris, Statistician, of the Poliomyelitis and Polio-like Diseases Surveillance Unit, with the assistance of Statistics Section, CDC.)

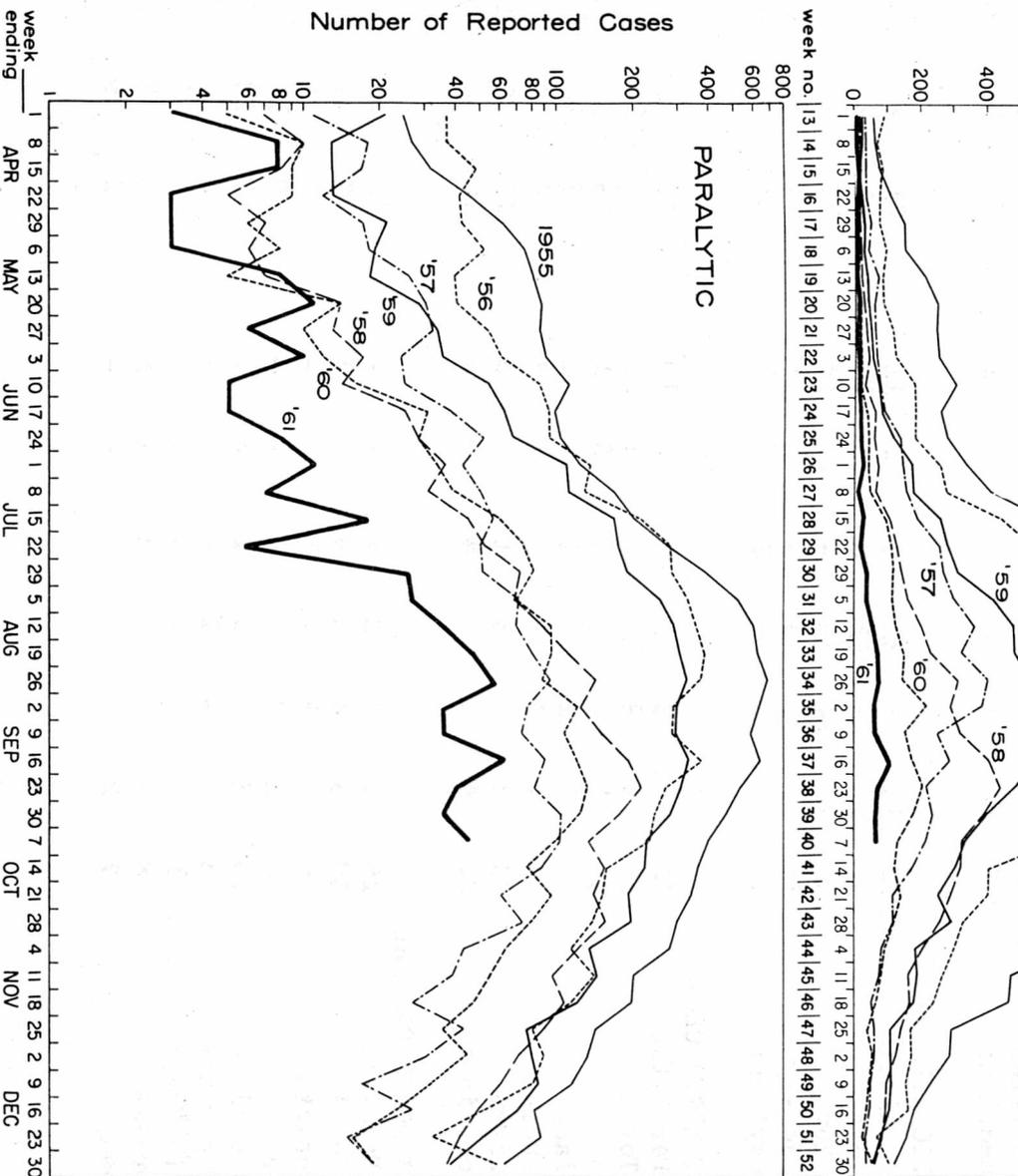


FIGURE 1
CURRENT U. S. POLIO INCIDENCE
COMPARED WITH YEARS 1955 -1960, April - December, by week

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS
AND COMMUNICABLE DISEASE CENTER

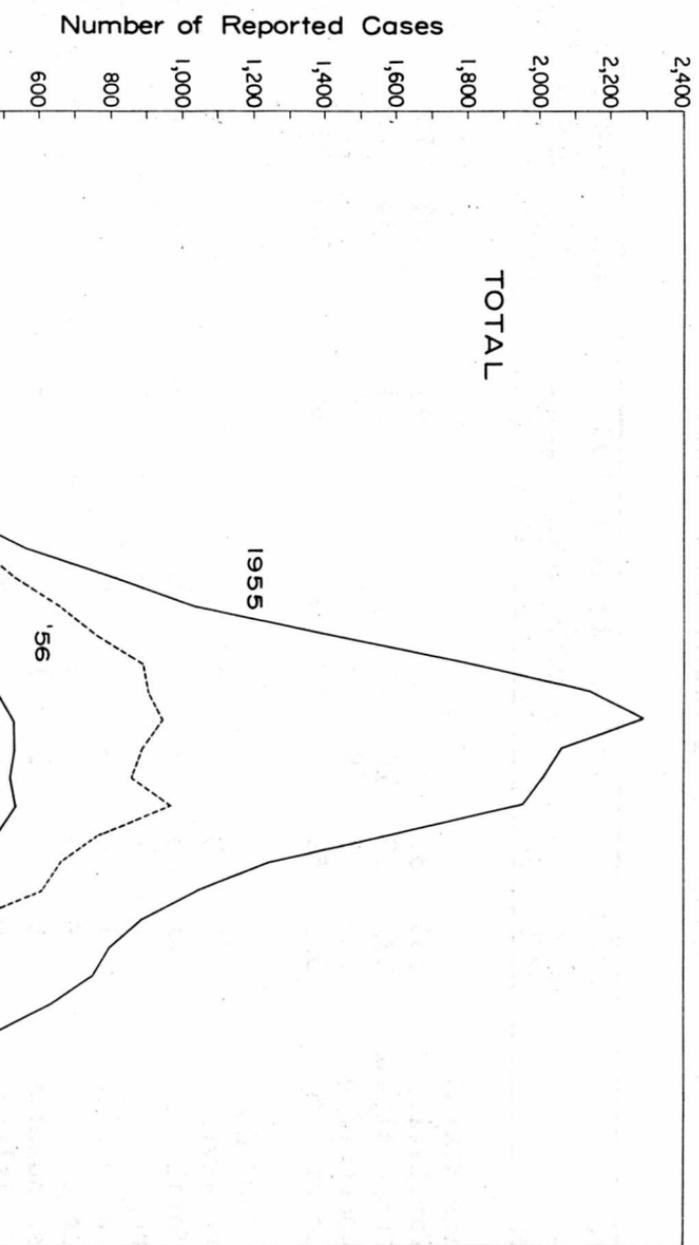


Table 1

TREND OF 1961 POLIOMYELITIS INCIDENCE

State and Region	Cumulative 1961	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		9/2	9/9	9/16	9/23	9/30	10/7		1960	1959	1958
UNITED STATES											
Paralytic	634	36	37	62	41	36	45	257	709	1758	1016
Nonparalytic	231	18	16	28	22	17	14	115	220	776	813
Unspecified	118	5	9	8	8	14	9	53	123	201	313
Total	983	59	62	98	71	67	68	425	1052	2735	2142
NEW ENGLAND											
Paralytic	17	3	2	2	1	-	2	10	51	127	19
Total	21	3	3	2	1	-	3	12	70	161	32
Maine	2	1	-	-	-	-	1	2	24	44	-
New Hampshire	1	-	-	-	-	-	-	-	-	3	-
Vermont	4	-	-	1	-	-	1	2	6	1	4
Massachusetts	9	2	1	1	1	-	-	5	9	80	15
Rhode Island	-	-	-	-	-	-	-	-	13	3	1
Connecticut	5	-	2	-	-	-	1	3	18	30	12
MIDDLE ATLANTIC											
Paralytic	172	14	15	33	17	11	11	101	121	214	150
Total	261	25	23	52	30	29	17	176	176	323	294
New York	186	20	14	46	24	17	14	135	95	193	104
New Jersey	33	3	2	3	3	1	1	13	31	62	144
Pennsylvania	42	2	7	3	3	11	2	28	50	68	46
EAST NORTH CENTRAL											
Paralytic	72	6	3	8	7	6	10	40	141	197	353
Total	113	9	8	12	10	8	11	58	224	516	1027
Ohio	31	1	-	3	3	5	1	13	56	95	181
Indiana	12	1	2	2	1	-	1	7	54	53	55
Illinois	25	1	2	1	1	1	3	9	59	134	123
Michigan	23	2	2	3	1	2	3	13	35	214	645
Wisconsin	22	4	2	3	4	-	3	16	20	20	23
WEST NORTH CENTRAL											
Paralytic	25	1	2	2	4	1	-	10	41	292	71
Total	58	5	4	3	9	4	2	27	72	499	153
Minnesota	6	-	1	-	1	-	-	2	21	109	10
Iowa	18	1	2	1	5	-	-	9	11	123	37
Missouri	15	2	-	1	1	2	1	7	18	155	61
North Dakota	3	-	-	1	-	1	-	2	4	9	18
South Dakota	1	-	1	-	-	-	-	1	1	5	1
Nebraska	8	-	-	-	2	1	1	4	8	34	13
Kansas	7	2	-	-	-	-	-	2	9	64	13

Table 1 (Continued)

State and Region	Cumula- tive 1961	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		9/2	9/9	9/16	9/23	9/30	10/7		1960	1959	1958
SOUTH ATLANTIC											
Paralytic	125	-	6	4	2	7	16	35	160	326	150
Total	167	3	8	8	5	7	19	50	189	409	223
Delaware	2	-	-	-	-	-	-	-	-	3	5
Maryland	27	-	1	1	-	3	1	6	76	18	7
D.C.	2	-	-	-	-	1	-	1	-	3	-
Virginia	10	-	-	1	1	1	-	3	15	104	43
West Virginia	23	-	3	1	3	1	1	9	19	89	83
North Carolina	17	3	-	2	1	-	3	9	26	90	25
South Carolina	29	-	1	3	-	-	14	18	36	31	7
Georgia	28	-	-	-	-	1	-	1	7	41	15
Florida	29	-	3	-	-	-	-	3	10	30	38
EAST SOUTH CENTRAL											
Paralytic	40	9	1	5	2	1	-	18	25	187	50
Total	71	9	3	7	4	4	3	30	93	257	81
Kentucky	26	1	-	2	-	2	3	8	61	46	13
Tennessee	17	-	3	-	3	1	-	7	19	128	32
Alabama	9	2	-	1	-	-	-	3	6	57	10
Mississippi	19	6	-	4	1	1	-	12	7	26	26
WEST SOUTH CENTRAL											
Paralytic	68	2	3	3	3	4	4	19	50	159	126
Total	131	4	6	7	5	9	8	39	80	262	183
Arkansas	15	2	1	-	4	-	-	7	13	102	8
Louisiana	44	1	2	3	-	4	4	14	8	33	24
Oklahoma	4	-	-	-	-	-	1	1	6	27	12
Texas	68	1	3	4	1	5	3	17	53	100	139
MOUNTAIN											
Paralytic	24	-	-	-	-	1	-	1	14	33	21
Total	42	-	2	-	1	1	-	4	26	58	51
Montana	3	-	-	-	-	-	-	-	3	1	19
Idaho	14	-	1	-	1	-	-	2	-	1	6
Wyoming	-	-	-	-	-	-	-	-	11	-	1
Colorado	6	-	-	-	-	-	-	-	8	12	8
New Mexico	3	-	-	-	-	-	-	-	2	13	3
Arizona	8	-	-	-	-	1	-	1	-	24	8
Utah	8	-	1	-	-	-	-	1	2	4	4
Nevada	-	-	-	-	-	-	-	-	-	3	2
PACIFIC											
Paralytic	91	1	5	5	5	5	2	23	106	223	76
Total	119	1	5	7	6	5	5	29	122	250	98
Washington	22	1	1	1	1	-	2	6	13	80	7
Oregon	14	-	1	-	1	1	-	3	9	51	14
California	79	-	3	5	4	3	3	18	99	112	64
Alaska	-	-	-	-	-	-	-	-	-	6	1
Hawaii	4	-	-	1	-	1	-	2	1	1	12
TERRITORY											
Puerto Rico	6	-	-	1	-	-	-	1	59	1	2

